

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2003/001519

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. ⁷: E04C 3/29, 5/07

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DWPI IPC E02H E04B E04C E04H and Keywords (steel metal, rod bar rebar cabl reinfrc core, tub cylind sheath
sleev cas jacket, fibr fibre filament, resin poly vinyl epoxy, fill inner interior inside center centr core, hybrid fiber fibr
poly, composit concrete)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4265981 A (CAMPBELL) 5 May 1981 column 4, lines 5-10 Fig. 4	
A	Derwent Abstract Accession No. 53622C/31, Class A93, P64, Q44 DE 2902296 A (FOCKE) 24 July 1980	
A	Derwent Abstract Accession No. 87-311165/44, Class P73, JP 62-220637 A (SUMITOMO ELEC IND KK) 28 September 1987	

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

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|---|---|
| <p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> | <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p> |
|---|---|

Date of the actual completion of the international search
21 January 2004

Date of mailing of the international search report
28 JAN 2004

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	VAN ERP, G.M. (1999) "A new type of carbon fibre reinforced composite beam for civil engineering applications", Proceedings of the 1 st ACUN International Composites Conference (Australia-Canada-USA-New Zealand), pages 23-26	
A	VAN ERP, G.M. (1999) "A new fibre composite beam - an experimental study of the structural behaviour", 16 th Australasian Conference on the Mechanics of Structures and Materials, pages 487-492	
A	VAN ERP G.M. (1999) "A new fibre composite beam for civil engineering applications", Composites Fabrication, July, pages 30-31	
A	AYERS, S.R. et al (2000) "Development of a new core material for composites in primary structural applications", Proceedings of the 2 nd ACUN International Composites Meeting (Australia-Canada-USA-New Zealand), pages 247-252	
A	VAN ERP G.M. et al (2000) "Particulate filled resin core materials for fibre composites in civil engineering applications", Materials Australia Vol. 32 No. 1, pages 17-20	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2003/001519

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member	
US	4265981	AU	35906/78
		FR	2391067
DE	2902296	NONE	
JP	62220637	NONE	
		END OF ANNEX	